O.I.P.E JC133
OCT 19 2004
PATENT & TRADEMARK OFFICE

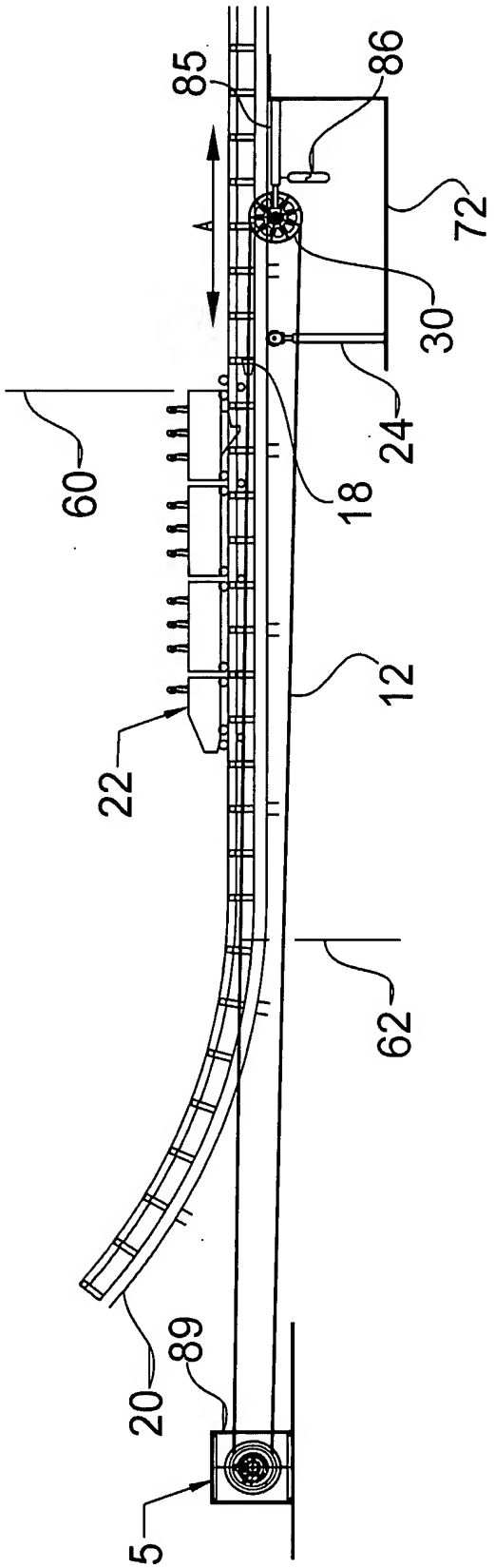

FIGURE 1

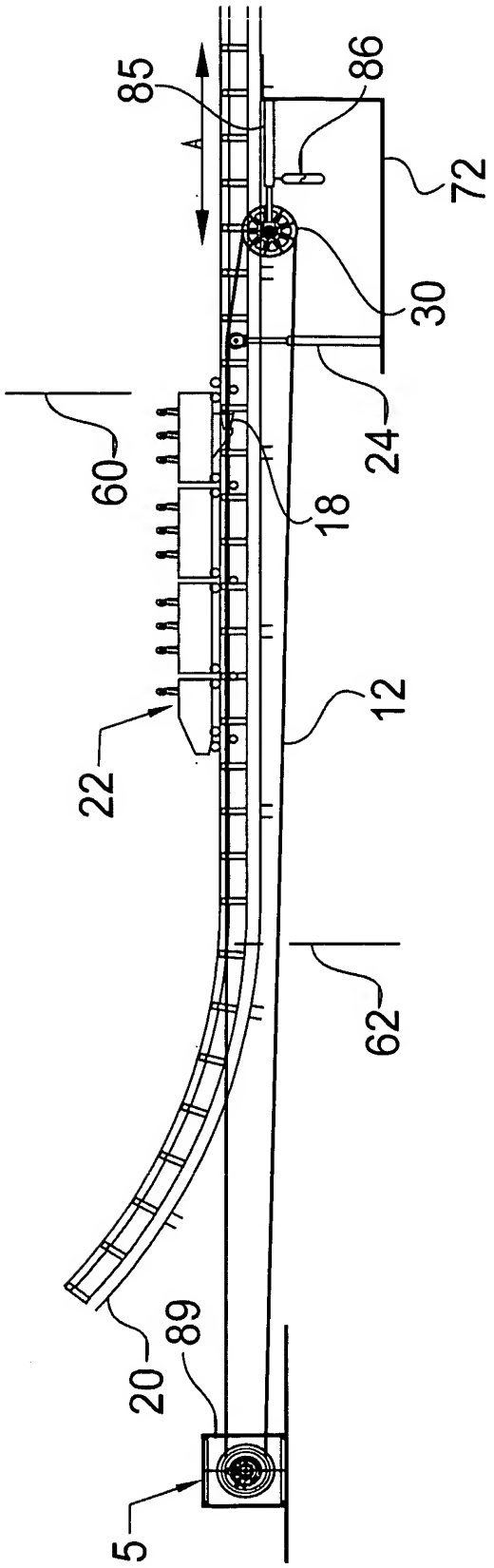

FIGURE 2

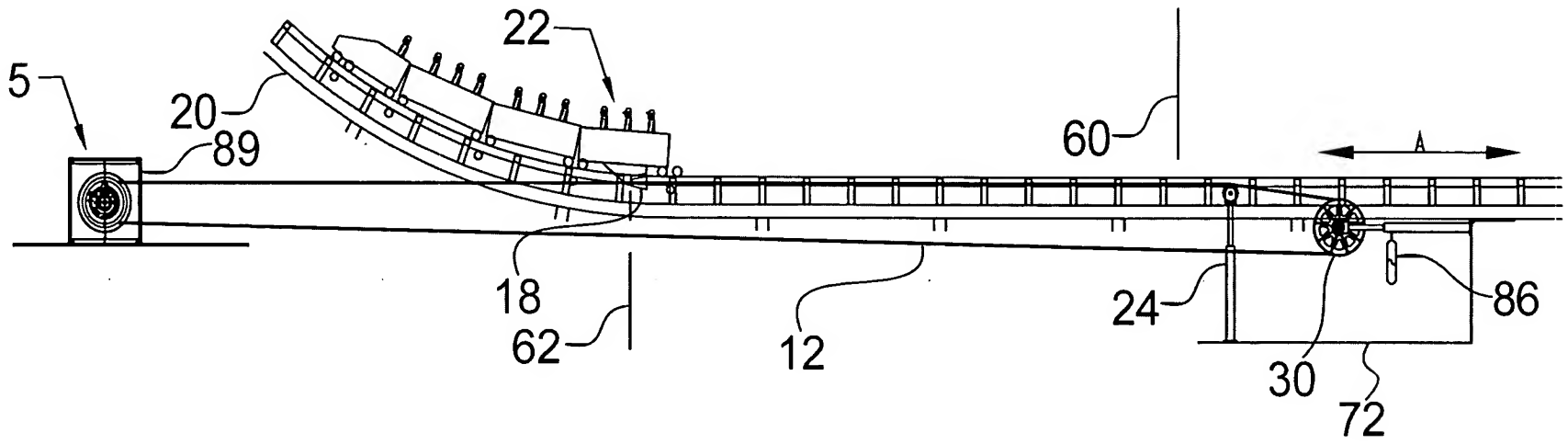

FIGURE 3

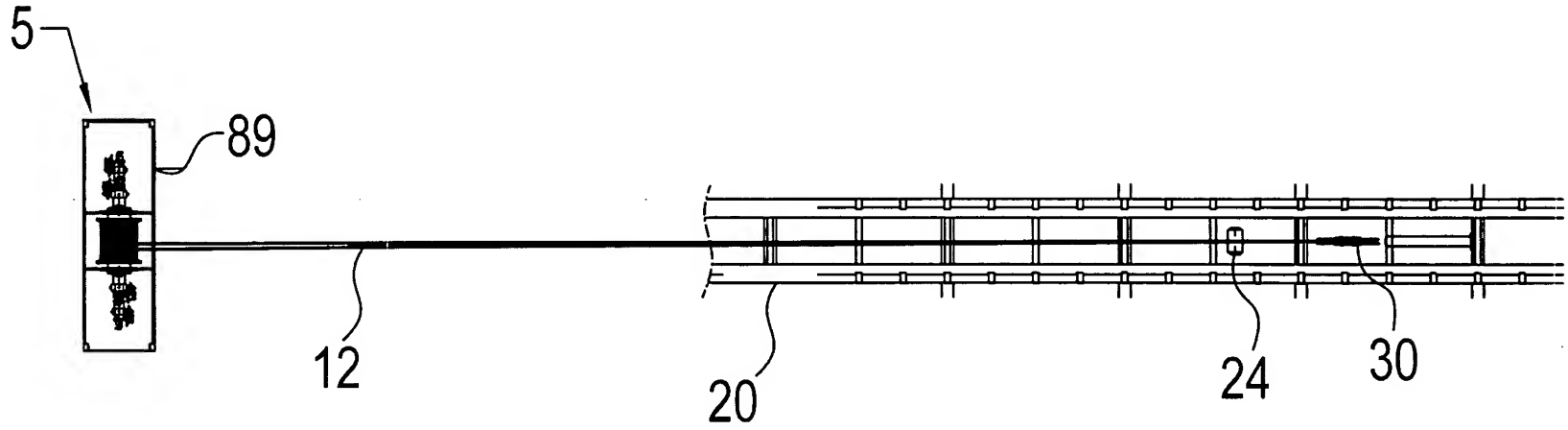

FIGURE 4

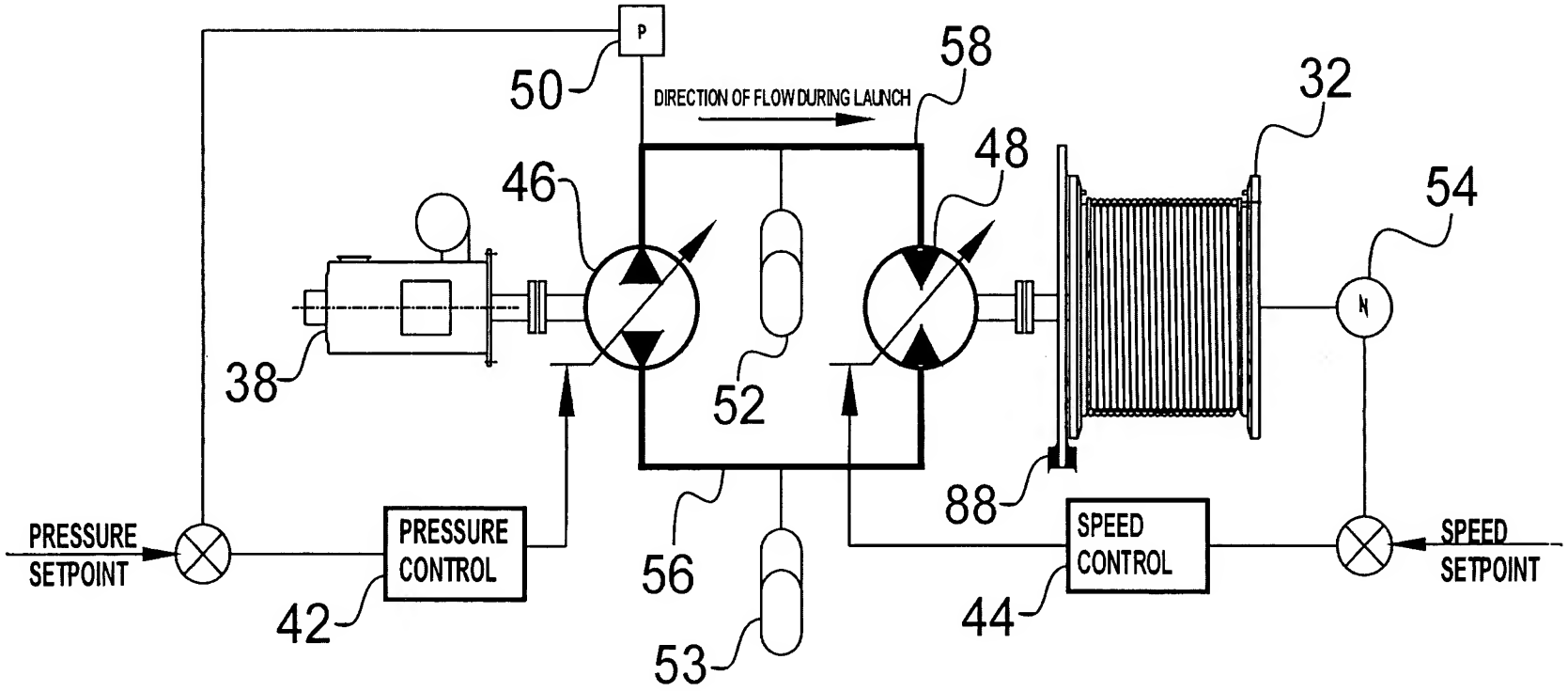
P
50
58
DIRECTION OF FLOW DURING LAUNCH
32
48
46
54
N
38
52
88
PRESSURE
SETPOINT
PRESSURE
CONTROL
42
56
53
SPEED
CONTROL
44
SPEED
SETPOINT

FIGURE 5

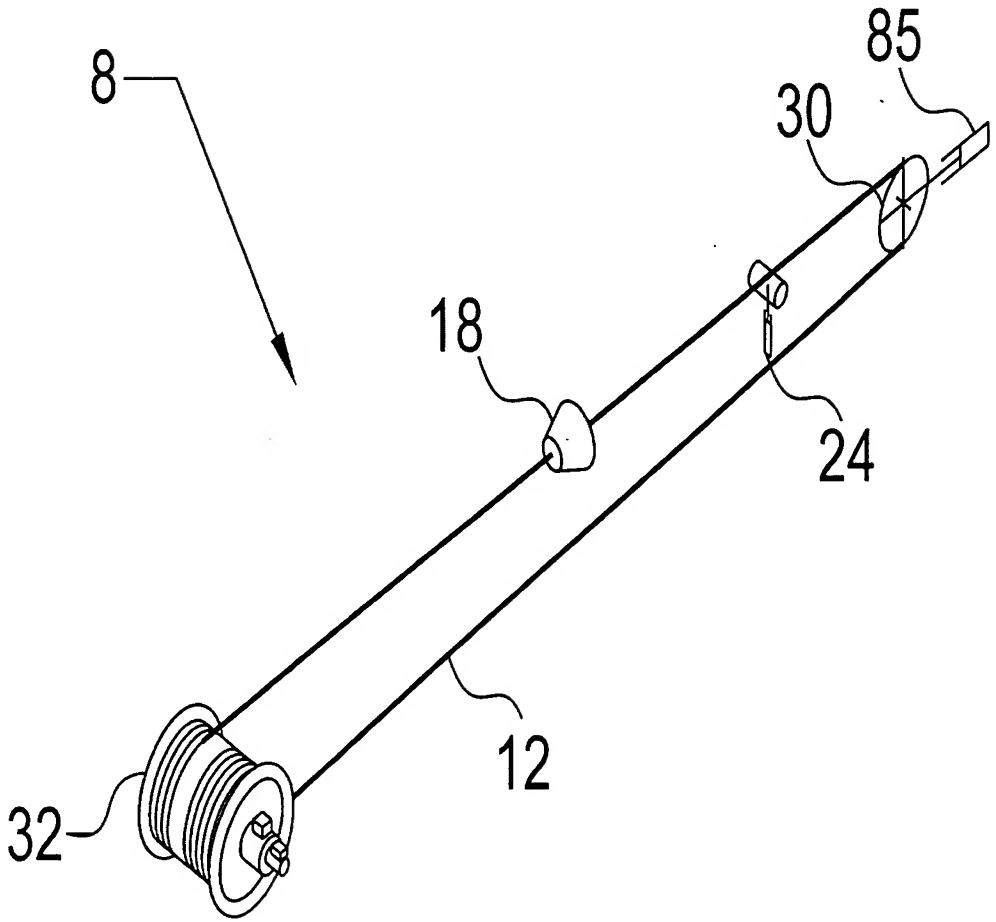

FIGURE 6

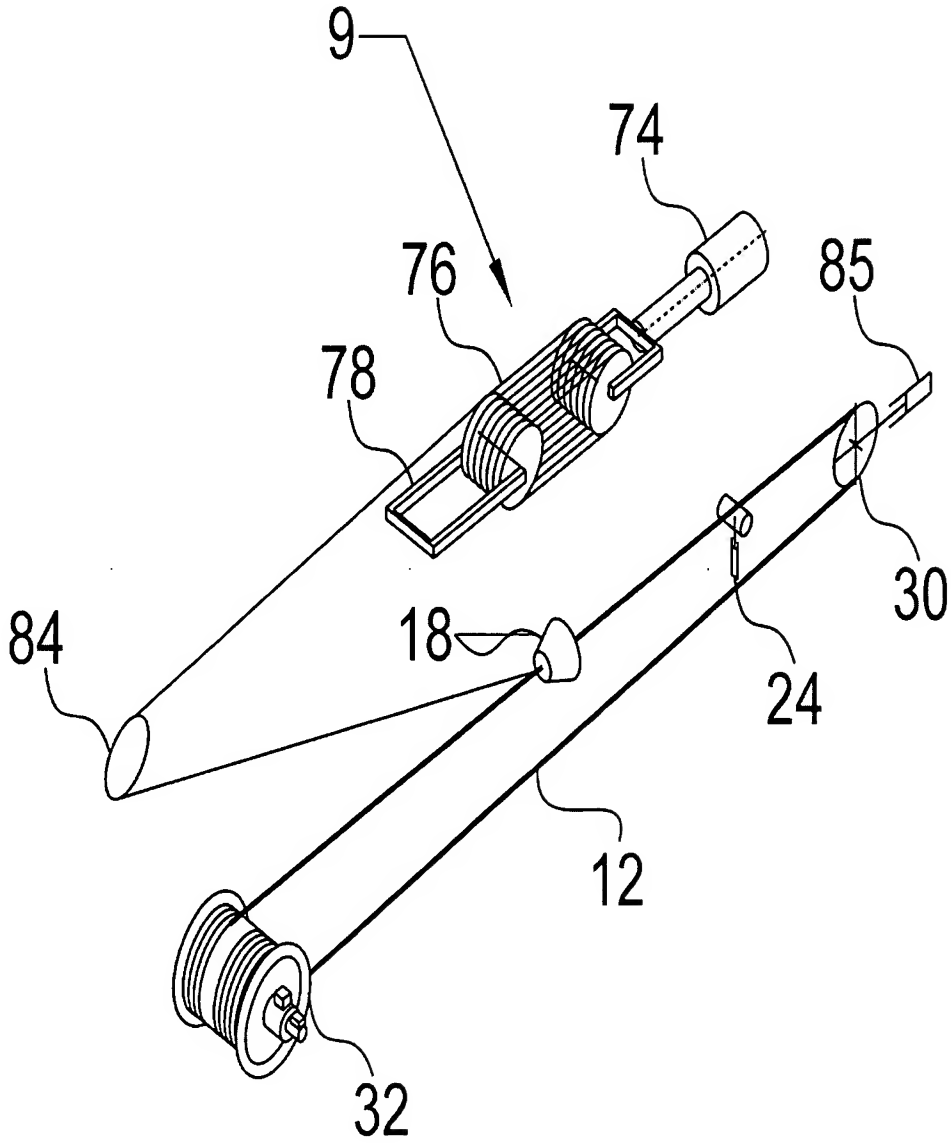

FIGURE 7

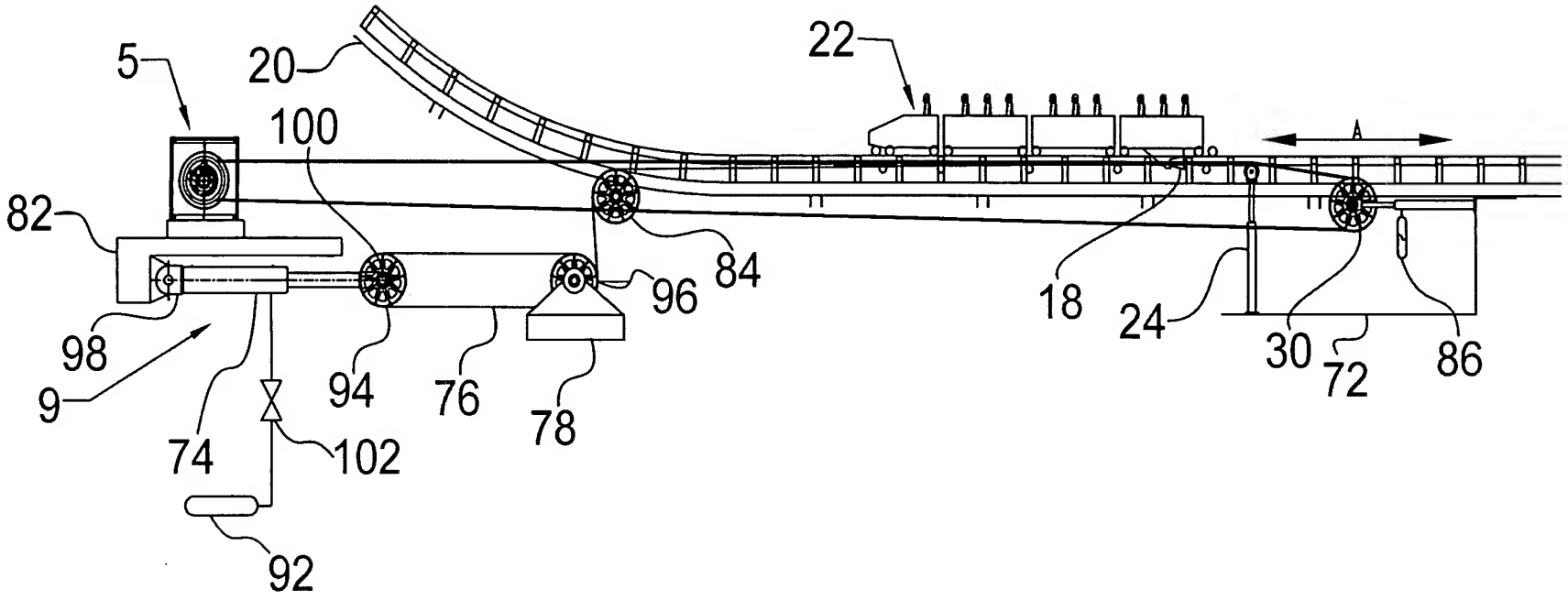

FIGURE 8

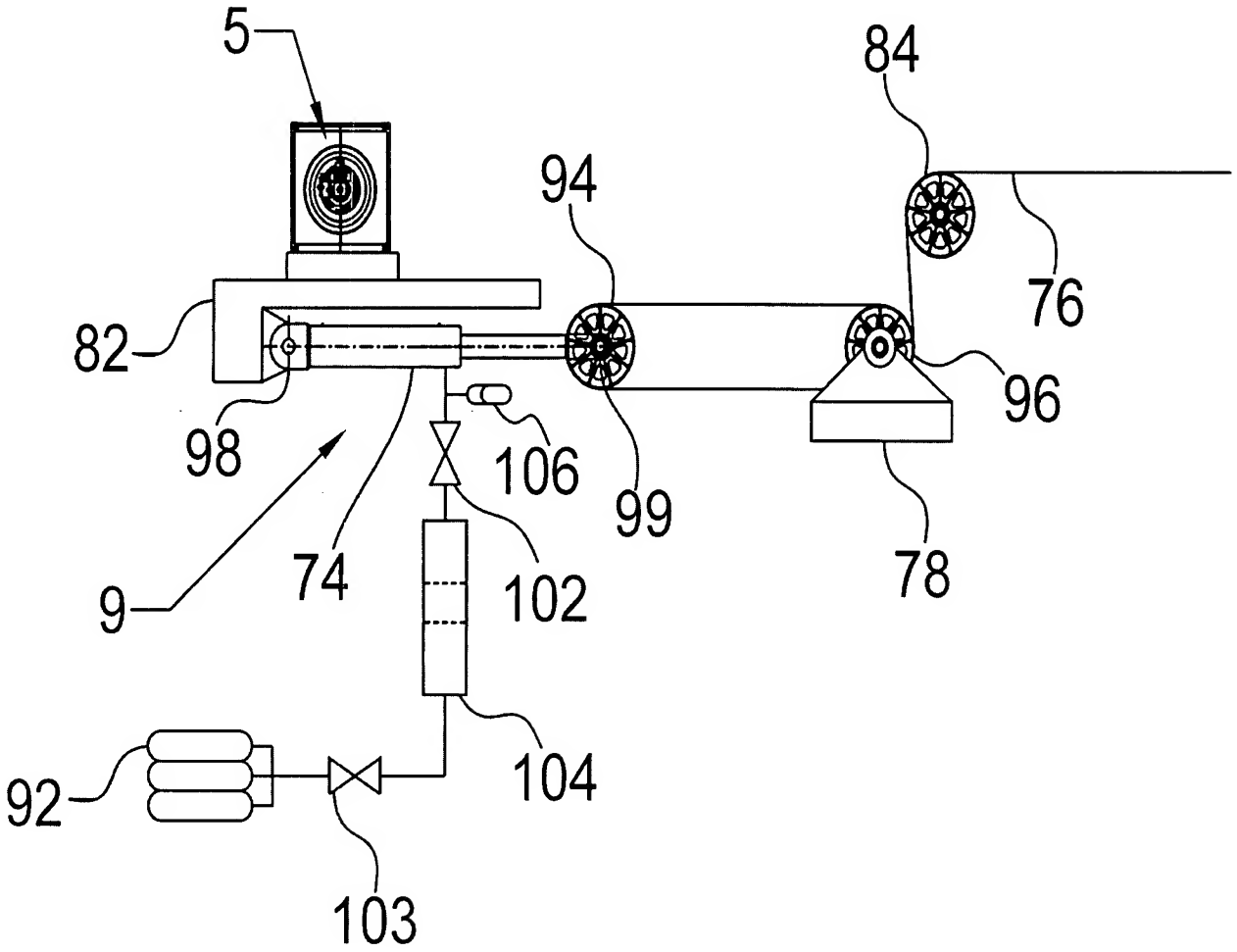

FIGURE 9

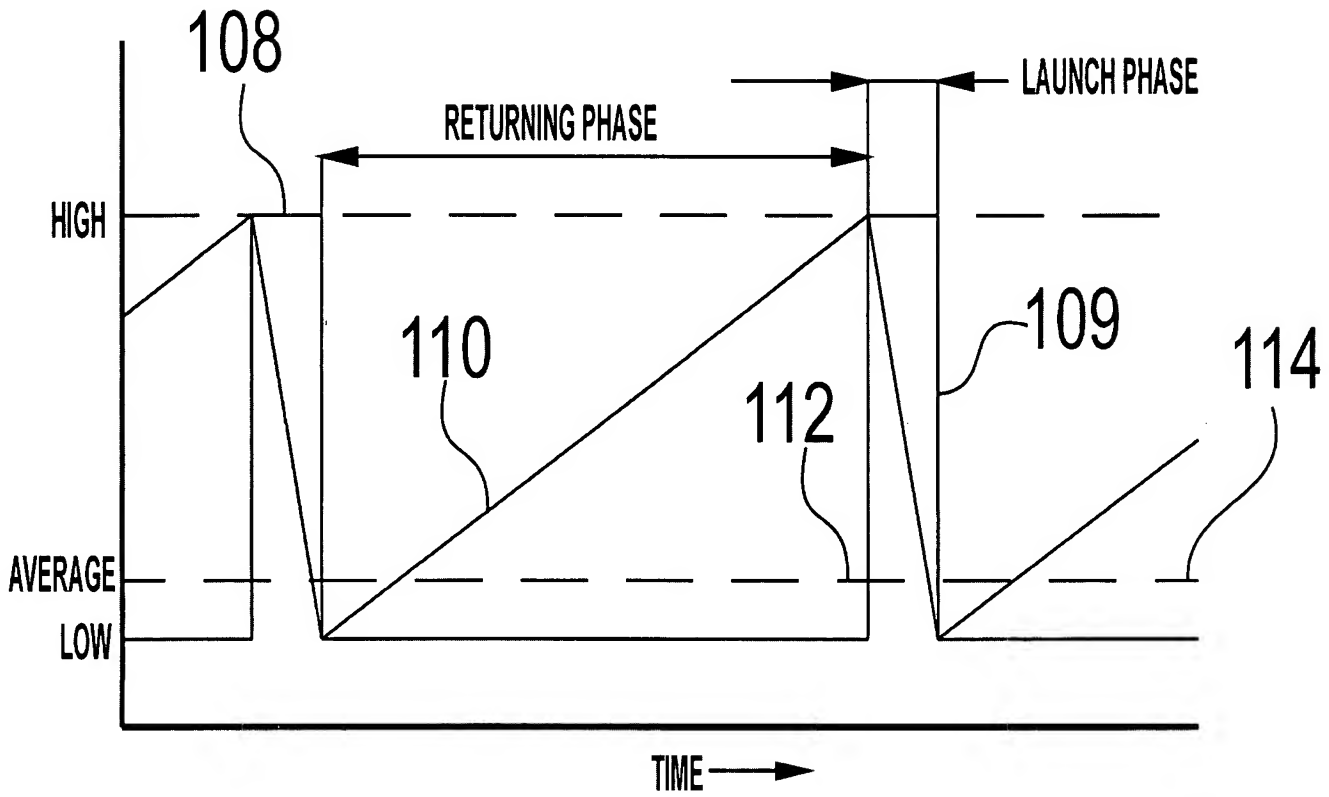
108
RETURNING PHASE
LAUNCH PHASE
HIGH
110
109
112
114
AVERAGE
LOW
TIME

FIGURE 10

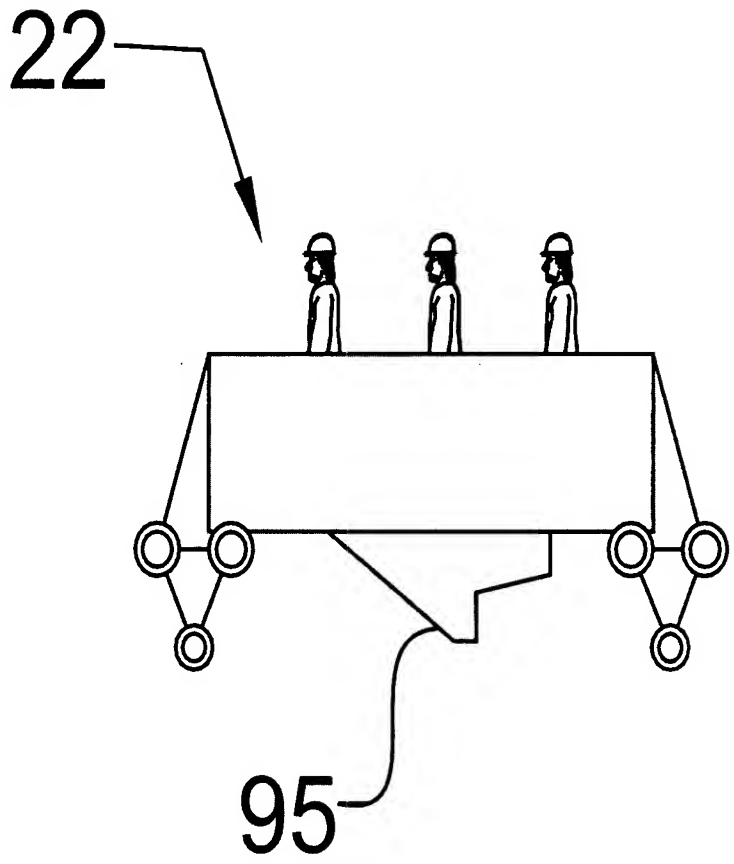

FIGURE 11

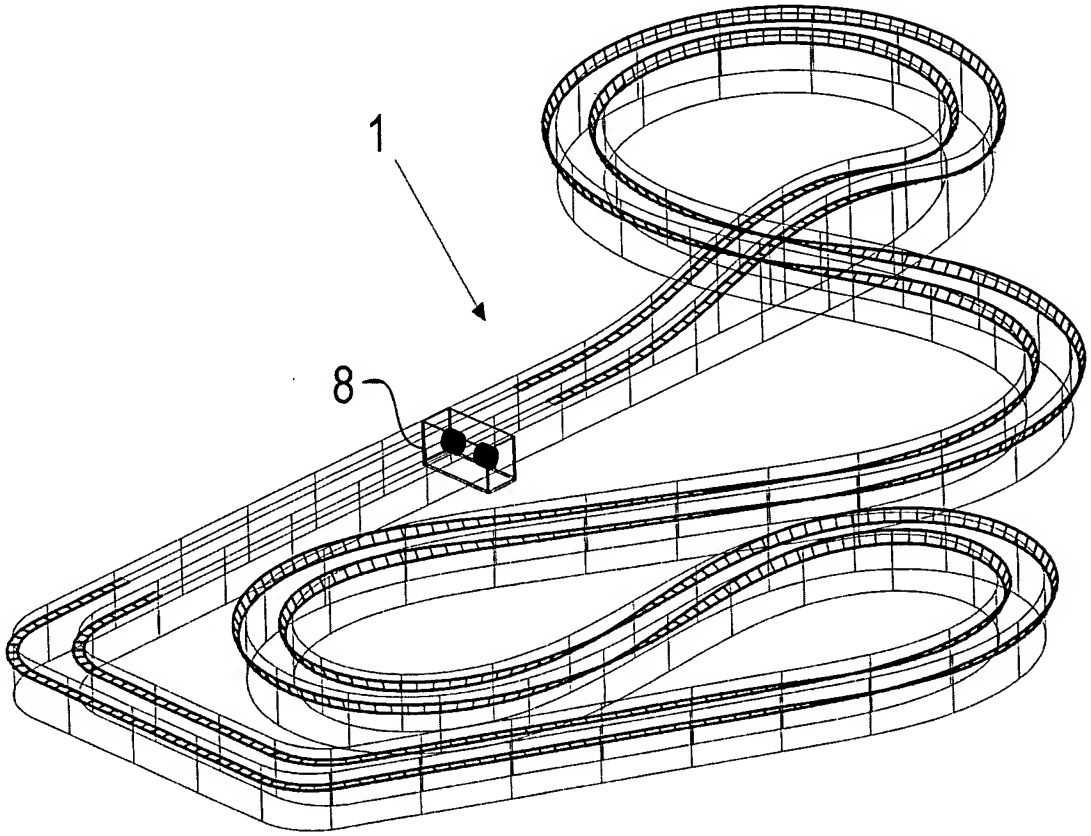

FIGURE 12

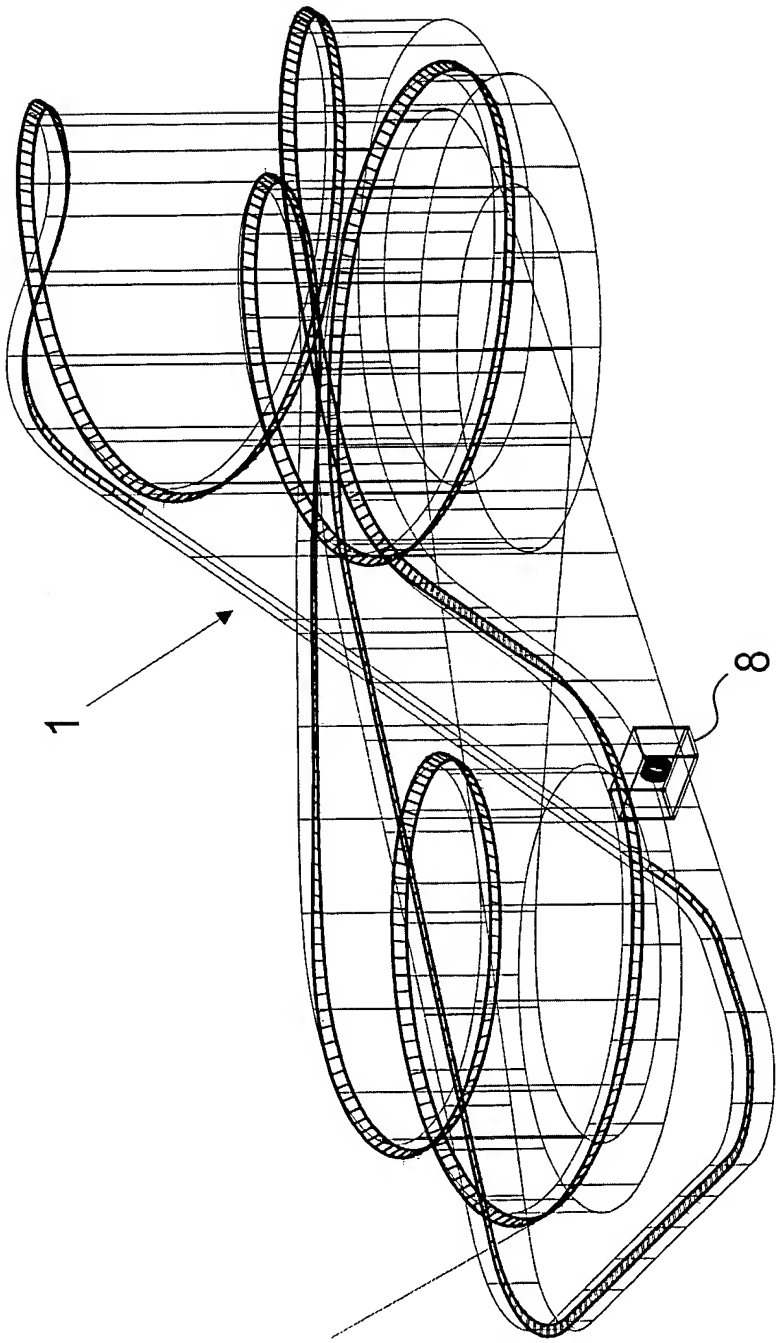

FIGURE 13

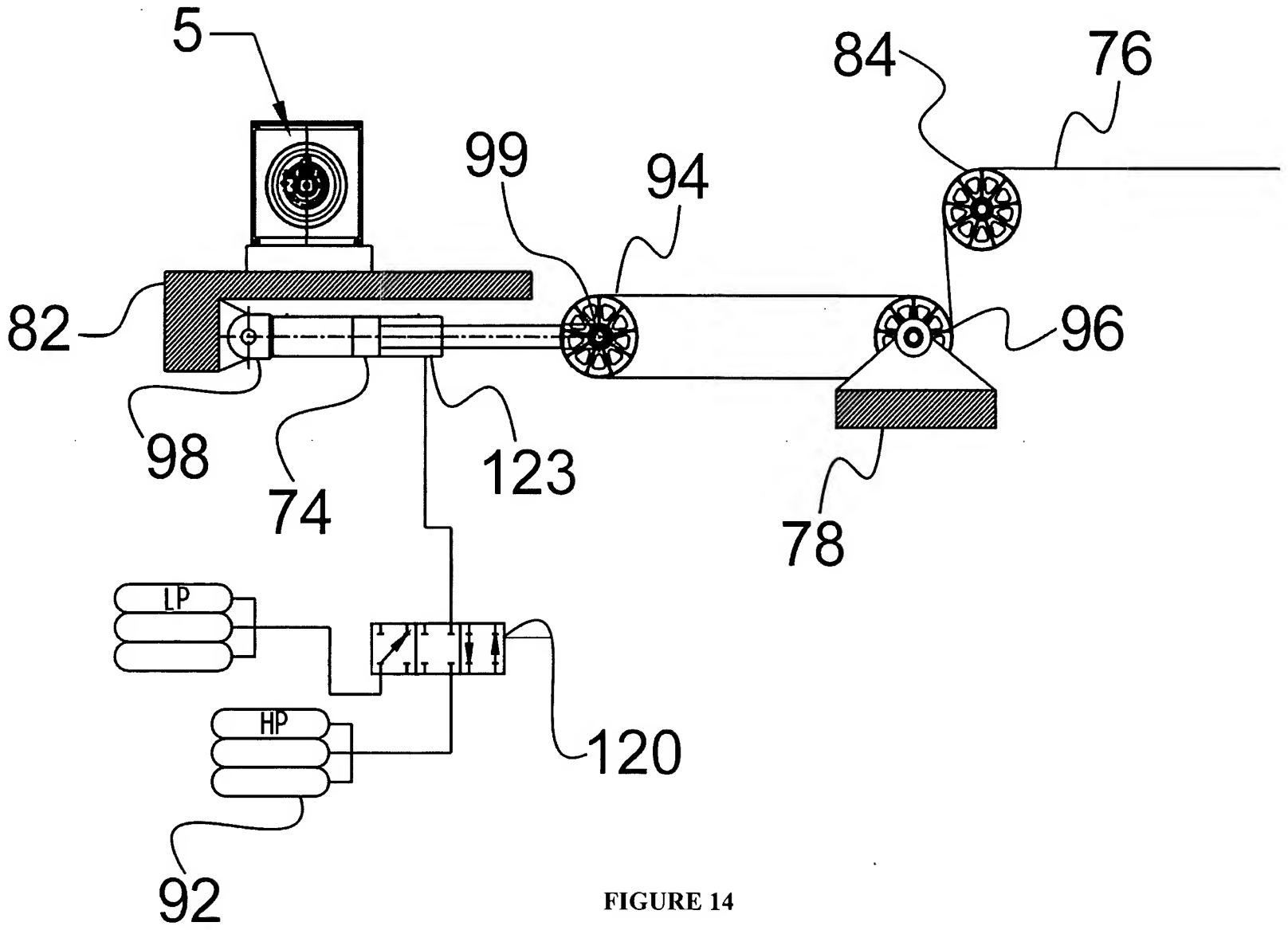

FIGURE 14